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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,947

03/13/2008

Eiju Suzuki

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EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1747

NOTIFICATION DATE

DELIVERY MODE

08/11/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/562,947	Applicant(s) SUZUKI ET AL.	
	Examiner JUSTIN FISCHER	Art Unit 1747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 25, 2011 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 6, and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Imamura (US 3,913,652, of record).

Imamura teaches a tire construction including an end cover rubber, wherein said rubber preferably includes natural rubber and synthetic cis1,4 polyisoprene (Column 2, Lines 27+). The reference further teaches (a) first and second embodiments having 20 phr and 50 phr, respectively, of cis 1,4 polyisoprene.(end points are recognized as express disclosures) and (b) the use of cis 1,4 polyisoprene having a cis 1,4 content of at least 95 percent and a viscosity of at least 40 (Column 2, Lines 22+). Thus, Imamura is seen to anticipate the claims with respect to each of these limitations. It is

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emphasized that the disclosed range of Imamura between 95 and 100 percent is extremely small and thus, the reference is seen to fairly suggest embodiments having any cis 1,4 content between 95 and 100 percent.

With respect to claims 5 and 6, Imamura includes a plurality of examples containing 50 phr of carbon black (Table 1- Columns 3 and 4).

Regarding claims 11 and 12, the composition of Imamura is disclosed as being usable with carcass plies, belt plies, and chafer plies (Column 3, Lines 45+). In such an instance, the end cover rubber can be viewed as being part of the respective tire component or alternatively, can be viewed as "being applied to" a tire component.

As to claims 13 and 14, cis 1,4 contents of 99.6 percent and 99.9 percent are within the extremely narrow range of 95-100 percent disclosed by the reference.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5, 6, 10, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendrik (EP 893,281, newly cited).

Hendrik teaches a tire tread composition comprising 100 phr of natural rubber and synthetic cis 1,4 polyisoprene and 45-80 phr of reinforcing filler (silica and carbon black) (Abstract). The reference further teaches that said cis 1,4 polyisoprene content is greater than 90 percent. In this instance, the disclosed range of 90-100 percent is

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extremely small and thus, the reference is seen to fairly suggest embodiments having any cis 1,4 content between 90 and 100 percent. It is emphasized that Hendrik is seen to anticipate the claim with respect to the cis 1,4 content (separate from the claim as a whole).

Hendrik, however, is silent with respect to (a) the respective loadings of the natural rubber and the synthetic cis 1,4 polyisoprene and (b) the Mooney viscosity of said synthetic cis 1,4 polyisoprene.

Regarding (a), one would have found it obvious to use a wide variety of loadings given the general disclosure of Hendrik, including those having a synthetic cis 1,4 loading between 10 and 60 percent. It is emphasized that such a range encompasses half of the possible loadings and applicant has not provided a conclusive showing of unexpected results for the claimed loadings. In particular, a comparison between Example 3 and Comparative Example B in Table A filed on October 8, 2009 suggests almost the same tire properties. Also, a comparison between Example 2 and Comparative Example B demonstrates nearly a 17% improvement in processability for the Comparative Example and only an extremely small decrease in wear resistance and durability (unclear how such a showing demonstrates a criticality for loadings less than 60 percent).

With respect to (b), the claimed viscosity is consistent with those associated with synthetic cis 1,4 polyisoprene in the tire industry.

As to claims 13 and 14, cis 1,4 contents of 99.6 percent and 99.9 percent are within the extremely narrow range of 90-100 percent disclosed by the reference.

Response to Arguments

6. Applicant's arguments filed June 23, 2011 have been fully considered but they are not persuasive.

Regarding Table B, it is emphasized that the table fails to provide a conclusive showing of unexpected results for loadings between 10 and 60 percent, given a cis 1,4 content in accordance to the claimed invention. It is emphasized that each of the above noted references anticipates the claims with respect to a cis 1,4 content of at least 99 percent (given the extremely narrow and inclusive ranges disclosed by said references).

In regards to the natural rubber loading and the synthetic cis 1,4 polyisoprene loading, the results of Table A filed on October 8, 2009 have been addressed above.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JUSTIN FISCHER** whose telephone number is **(571)272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer
/Justin R Fischer/
Primary Examiner, Art Unit 1747
August 9, 2011